

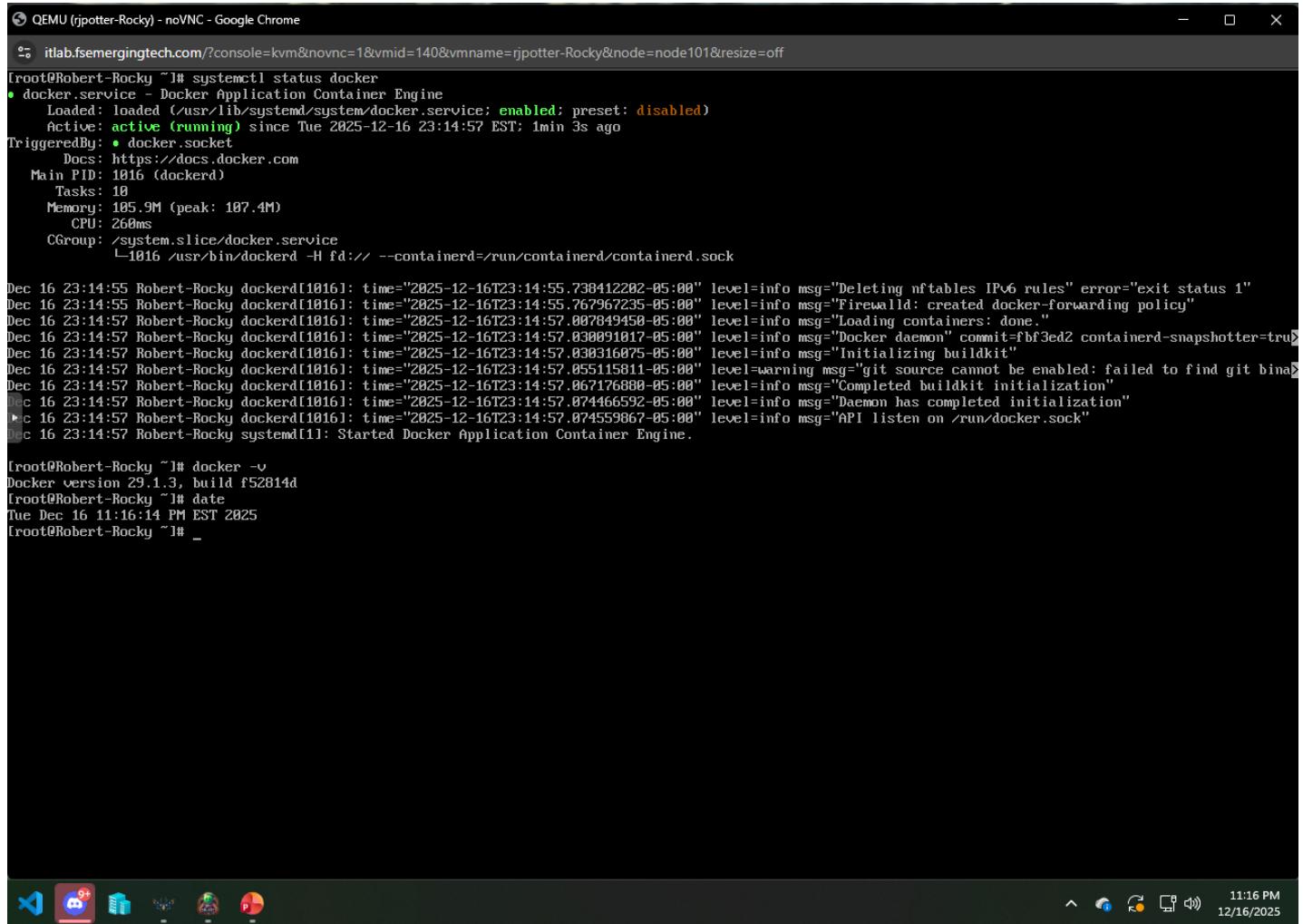
VCO Final Lab

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CTI1301 – VCO – C202512 Section 01

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Part 1



QEMU (rjpotter-Rocky) - noVNC - Google Chrome
itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=140&vmname=rjpotter-Rocky&node=node101&resize=off

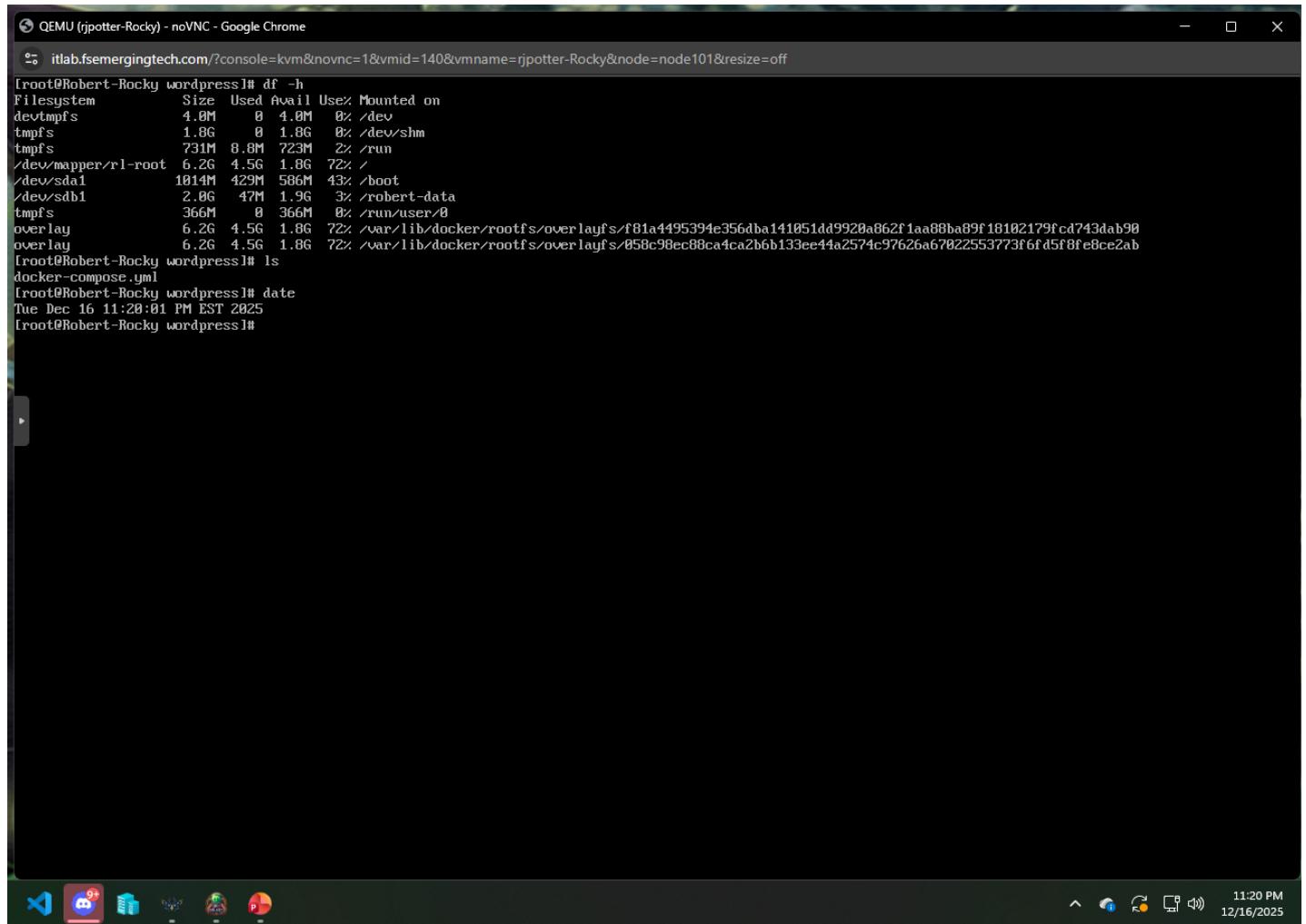
```
[root@Robert-Rocky ~]# systemctl status docker
● docker.service - Docker Application Container Engine
  Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: disabled)
    Active: active (running) since Tue 2025-12-16 23:14:57 EST; 1min 3s ago
      TriggeredBy: • docker.socket
        Docs: https://docs.docker.com
      Main PID: 1016 (dockerd)
        Tasks: 10
       Memory: 105.9M (peak: 107.4M)
         CPU: 260ms
      CGroup: /system.slice/docker.service
              └─1016 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Dec 16 23:14:55 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:55.738412202-05:00" level=info msg="Deleting nftables IPv6 rules" error="exit status 1"
Dec 16 23:14:55 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:55.767967235-05:00" level=info msg="Firewalld: created docker-forwarding policy"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.002849450-05:00" level=info msg="Loading containers: done."
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.030091017-05:00" level=info msg="Docker daemon" commit=fbf3ed2 containerd-snapshotter=true
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.030316075-05:00" level=info msg="Initializing buildkit"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.055115811-05:00" level=warning msg="git source cannot be enabled: failed to find git binary"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.067176880-05:00" level=info msg="Completed buildkit initialization"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.074466592-05:00" level=info msg="Daemon has completed initialization"
Dec 16 23:14:57 Robert-Rocky dockerd[1016]: time="2025-12-16T23:14:57.074559867-05:00" level=info msg="API listen on /run/docker.sock"

[root@Robert-Rocky ~]# docker -v
Docker version 29.1.3, build f52814d
[root@Robert-Rocky ~]# date
Tue Dec 16 11:16:14 PM EST 2025
[root@Robert-Rocky ~]# _
```

11:16 PM 12/16/2025

Part 2

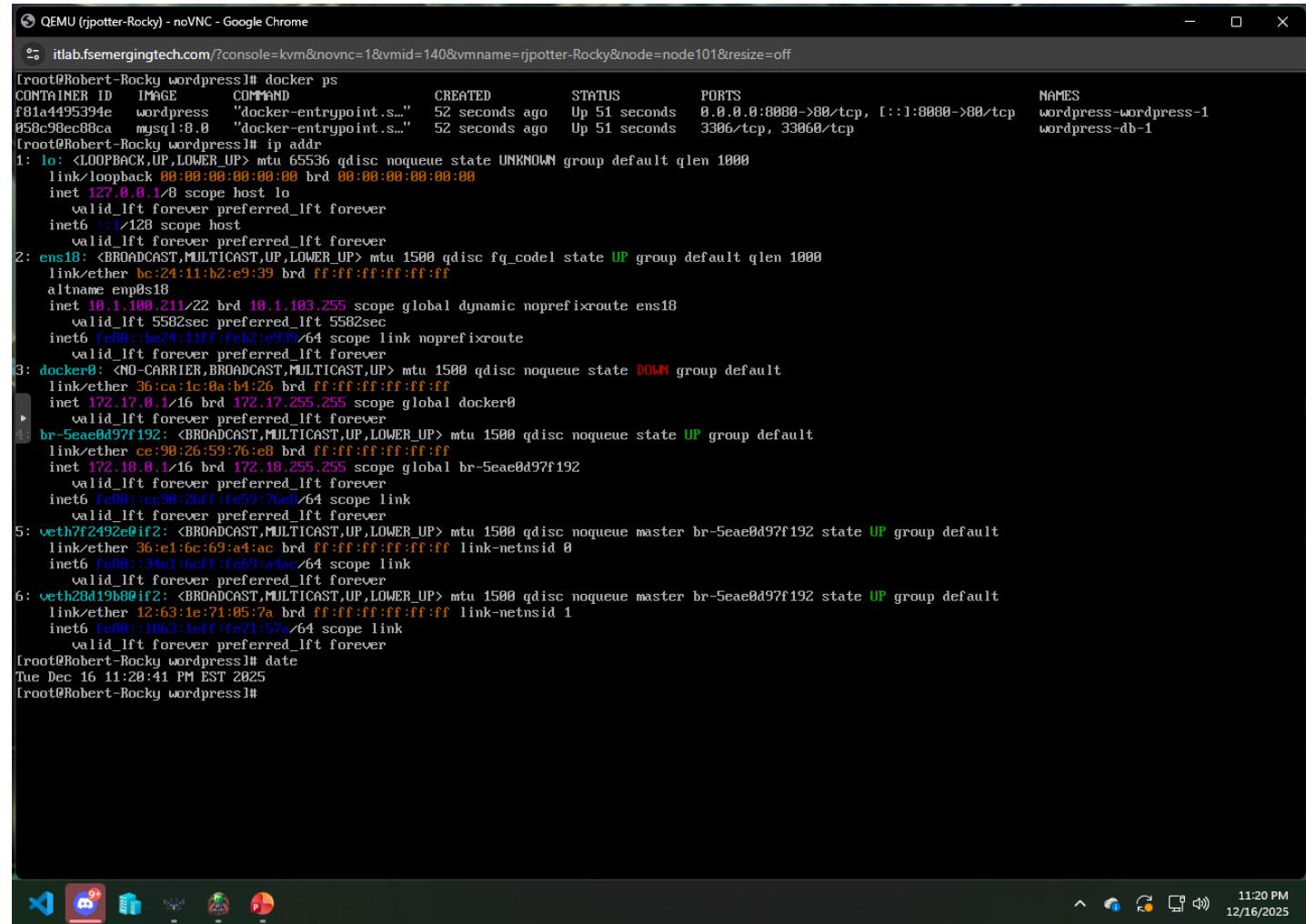


The screenshot shows a QEMU-based virtual machine running Rocky Linux. The terminal window displays the following command-line session:

```
Iroot@Robert-Rocky wordpress]$# df -h
Filesystem      Size  Used  Avail Use% Mounted on
/devtmpfs        4.0M   0  4.0M  0% /dev
tmpfs           1.8G   8  1.8G  0% /dev/shm
tmpfs           731M  8.8M  723M  2% /run
/dev/mapper/r1-root 6.2G  4.5G  1.8G  72% /
/dev/sda1       1014M 429M  586M  43% /boot
/dev/sdb1       2.0G  47M  1.9G  3% /robert-data
tmpfs           366M   0  366M  0% /run/user/0
overlay          6.2G  4.5G  1.8G  72% /var/lib/docker/rootfs/overlays/f81a4495394e356dba141051dd9920a862f1aa88ba89f18102179fc743dab90
overlay          6.2G  4.5G  1.8G  72% /var/lib/docker/rootfs/overlays/058c98ec88ca4ca2b6b133ee44a2574c97626a67022553773f6fd5f8fe8ce2ab
Iroot@Robert-Rocky wordpress]$# ls
docker-compose.yml
Iroot@Robert-Rocky wordpress]$# date
Tue Dec 16 11:28:01 PM EST 2025
Iroot@Robert-Rocky wordpress]$#
```

The terminal window is titled "QEMU (rjpotter-Rocky) - noVNC - Google Chrome". The URL in the address bar is "itlab.fsemergingtech.com/?console=kvm&novnc=1&vmid=140&vmname=rjpotter-Rocky&node=node101&resize=off". The system status bar at the bottom right shows the time as "11:20 PM" and the date as "12/16/2025".

Part 3



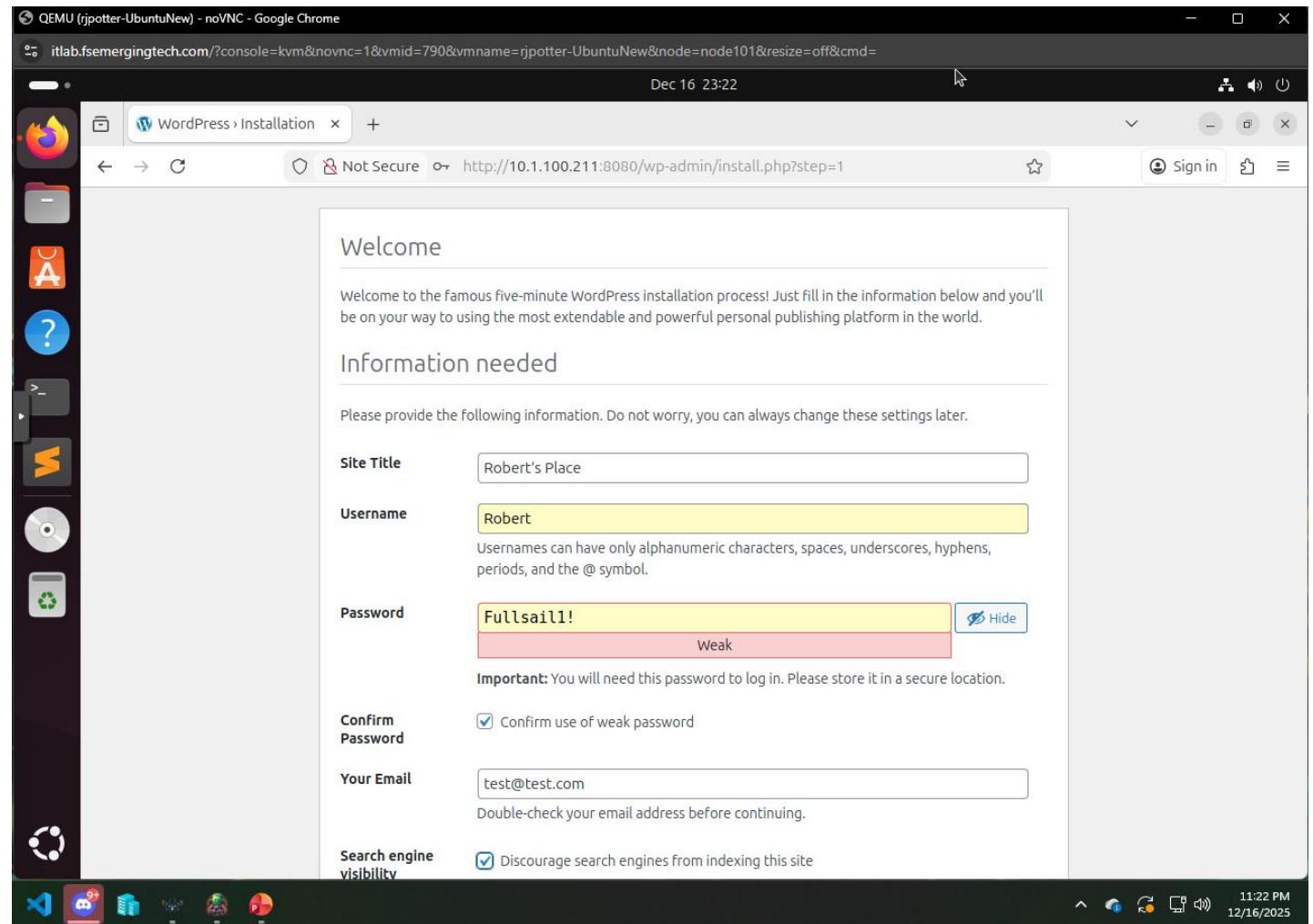
QEMU (rjpotter-Rocky) - noVNC - Google Chrome
itlab.fsemergingtech.com/?console=kvm&novc=1&vmid=140&vmname=rjpotter-Rocky&node=node101&resize=off

```
[root@Robert-Rocky wordpress]# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
f81a4495394e wordpress "docker-entrypoint.s..." 52 seconds ago Up 51 seconds 0.0.0.0:8000->80/tcp, [::]:8000->80/tcp wordpress-wordpress-1
058c98ec08ca mysql:8.0 "docker-entrypoint.s..." 52 seconds ago Up 51 seconds 3306/tcp, 33060/tcp wordpress-db-1

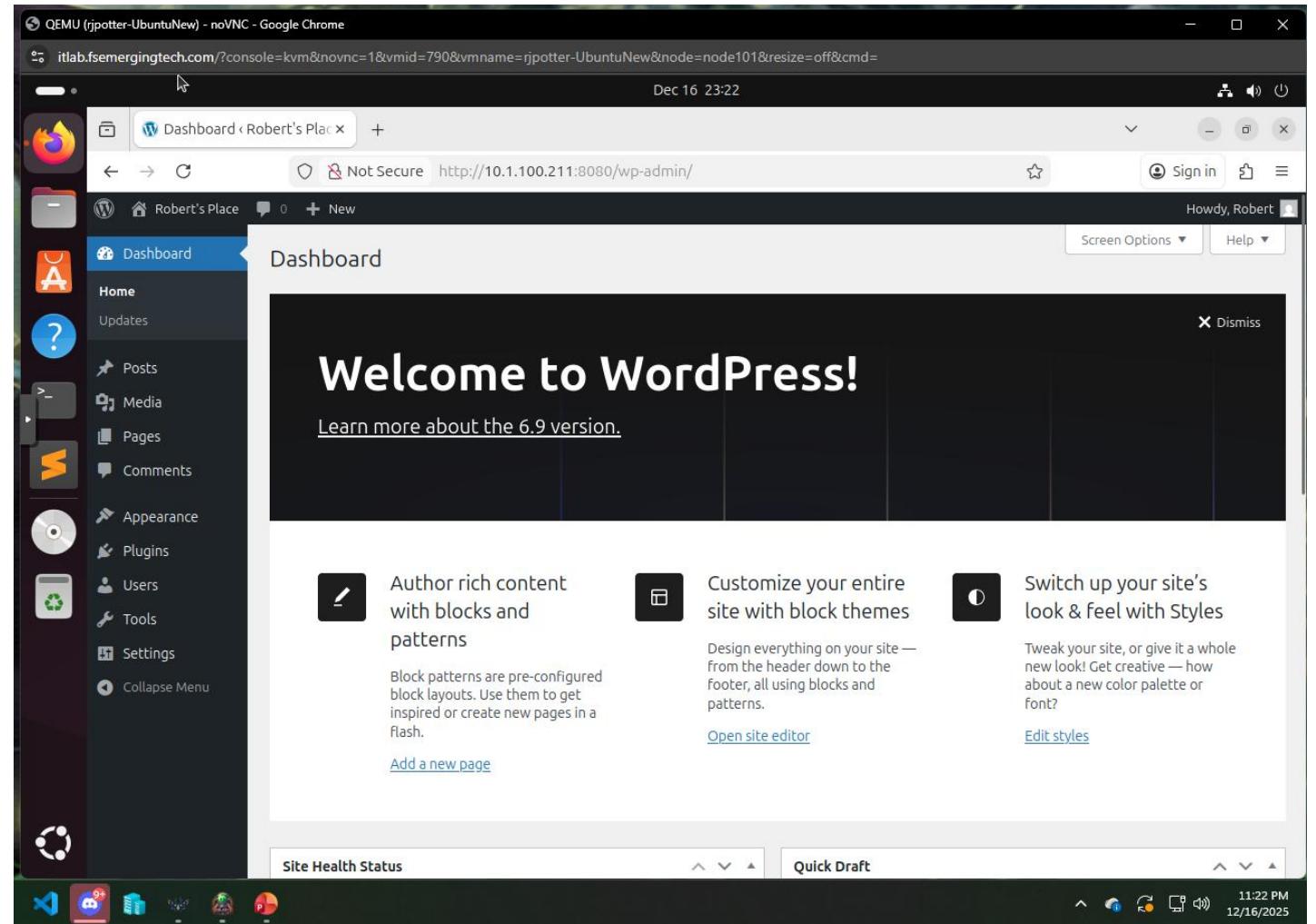
[root@Robert-Rocky wordpress]# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens18: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether bc:24:11:b2:e9:39 brd ff:ff:ff:ff:ff:ff
    altname emp0s18
    inet 10.1.100.211/22 brd 10.1.103.255 scope global dynamic noprefixroute ens18
        valid_lft 5582sec preferred_lft 5582sec
    inet6 fe80::bc24:1ff:feb2:e939/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether 36:ca:1c:0a:b4:26 brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
        valid_lft forever preferred_lft forever
4: br-5eae0d97f192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
    link/ether ce:90:26:59:76:e8 brd ff:ff:ff:ff:ff:ff
    inet 172.18.0.1/16 brd 172.18.255.255 scope global br-5eae0d97f192
        valid_lft forever preferred_lft forever
    inet6 fe80::cc98:26ff:fe59:7e8/64 scope link
        valid_lft forever preferred_lft forever
5: veth7f2492e@if2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master br-5eae0d97f192 state UP group default
    link/ether 36:e1:6c:69:a4:ac brd ff:ff:ff:ff:ff:ff
    inet6 fe80::34e1:6cff:fe69:a4ac/64 scope link
        valid_lft forever preferred_lft forever
6: veth28d19b8@if2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master br-5eae0d97f192 state UP group default
    link/ether 12:63:1e:71:05:7a brd ff:ff:ff:ff:ff:ff
    inet6 fe80::1863:1eff:fe71:57a/64 scope link
        valid_lft forever preferred_lft forever

[root@Robert-Rocky wordpress]# date
Tue Dec 16 11:20:41 PM EST 2025
[root@Robert-Rocky wordpress]#
```

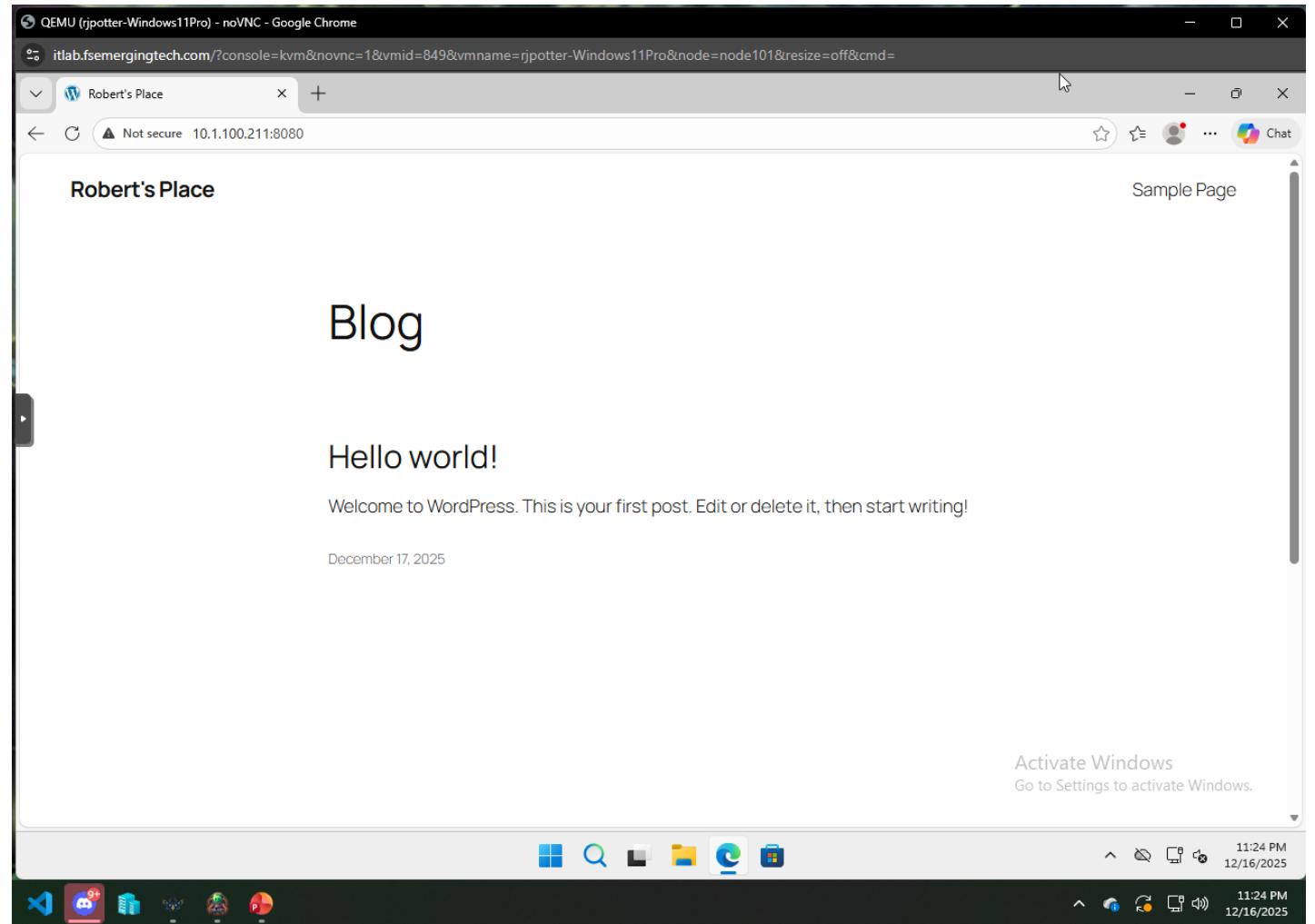
Part 4



Part 5



Part 6



Part 7

The screenshot shows the Gemini browser window displaying the Virtual Lab interface at itlab.fsemergingtech.com/#v1:0=%2Fpool%2F2512-CTI1301-rjpotter:4:::29::. The interface includes a navigation bar with links like Food, eq related, Eve Online, VA, Health Care Stuff, Coursera, Cybersecurity Reso..., CCNA, Jobs, UO, Tryhackme, and All Bookmarks. The main area shows a "Virtual Lab" header and a "Resource Pool: 2512-CTI1301-rjpotter". On the left, a "Pool View" sidebar lists "Datacenter" and "2512-CTI1301-rjpotter" with various VM entries. On the right, a "Search" bar and a table list "Members" (qemu) and "Permissions". At the bottom, a "Tasks" section shows log entries for VM shutdowns and console sessions.

Virtual Lab Virtual Environment 8.3.2

Resource Pool: 2512-CTI1301-rjpotter

Pool View

Datacenter

2512-CTI1301-rjpotter

- 139 (rjpotter-Server2025)
- 140 (rjpotter-Rocky)
- 323 (rjpotter-Ubuntu)
- 790 (rjpotter-UbuntuNew)
- 791 (rjpotter-WordPress)
- 849 (rjpotter-Windows11Pro)
- 789 (rjpotter-UbuntuTemplate)

9130102 (VCO-WordPressBitnami-v2506)

Search

Summary

Members

Permissions

Type	Description	Disk usage...	Memory us...	CPU usage	Uptime	Host CPU ...
qemu	139 (rjpotter-Server2025)				-	
qemu	140 (rjpotter-Rocky)				-	
qemu	323 (rjpotter-Ubuntu)				-	
qemu	790 (rjpotter-UbuntuNew)				-	
qemu	791 (rjpotter-WordPress)				-	
qemu	849 (rjpotter-Windows11Pro)				-	
qemu	789 (rjpotter-UbuntuTemplate)				-	

Tasks Cluster log

Start Time	End Time	Node	User name	Description	Status
Dec 16 23:25:02	Dec 16 23:25:07	node101	rjpotter@FS-SSO	VM 140 - Shutdown	OK
Dec 16 23:23:37	Dec 16 23:24:54	node101	rjpotter@FS-SSO	VM/CT 849 - Console	OK
Dec 16 23:21:14	Dec 16 23:23:30	node101	rjpotter@FS-SSO	VM/CT 790 - Console	OK

11:25 PM 12/16/2025